

Project Fact Sheet

Project Title **LEnZ – Rural Energy Supply of the Future**

Keywords Network, technology transfer, combined use of biomass and solar energy, rural energy autonomy

Project Details

Project Start	2020	Duration	2 1/2 Years
Grant Scheme	European Regional Development Fund	Project ID	EU1911-0005
Funding Authority	EU; Bavarian State Ministry for Science		
Project Budget	665.163 €		
Project Leader	Prof. Dr.-Ing. Wilfried Zörner Prof. Dr.-Ing. Tobias Schrag Prof. Dr.-Ing. Markus Goldbrunner		
Contact Person	Stefan Schneider		
Project Partners	soleg GmbH, varmeco GmbH & Co. KG, GRAMMER Solar GmbH, Nahwärme Pfofeld eG., Rösel Bioenergie GbR, Bichlmeier-Würtinger Biogas GbR, ENERPIPE GmbH, Elektro Neuber GmbH, Georg Bergsteiner GmbH, ratiotherm GmbH & Co. KG, ENMA Energie Management GmbH		

Description

Rural areas can play a key role in energy transition of given regions, where renewable energy resources such as biomass or solar energy are primarily produced. Given a progressing urbanisation and the challenges it poses, strengthening rural areas bears a variety of advantages, particularly from an energy policy perspective.

Based on the two previous projects Innovation Hub “Biogas 4.0” and Center of Excellence “Residential Heat Supply”, this project places emphasis on a combined use of biomass and solar energy and focuses on energy autonomy in rural settlements and rural areas in terms of electricity, heat and mobility.

The project is implemented by a joint innovation cluster called "Rural Energy Supply of the Future", fostering a network of subject matter experts from different sectors, specifically from the fields of residential buildings, energy distribution, storage and use, and bioenergy production. Besides the Institute of new Energy Systems of the Technische Hochschule Ingolstadt, eleven Bavarian small and medium-sized enterprises are involved. Building on the industry partners' practical experiences and their potential for innovation, this cooperation is

grounded in an application-oriented as well as targeted implementation of research results in the addressed topic area. A testament thereof are the two focus areas that have been jointly defined at the beginning of the project and serve as a basis for future research collaborations:

1. "The bio-energy village in combination with wind and solar". This topic will serve as a platform for a holistic assessment of structures, needs and potentials of decentralised energy supply in rural areas of the future.
2. "Electricity-based heat supply and biomass-based heating networks" with the key question: In comparison to fossil fuels, which rural energy supply offers which kind of advantages under which boundary conditions?